

CLAIMS

1. A DC driver circuit coupled to a tip/ring line, said DC driver circuit comprising:

a first capacitor coupled to a first switch, said first switch coupled to an amplification circuit, said amplification circuit being coupled to said tip/ring line;

an RC circuit coupled to a second switch, said second switch coupled to said amplification circuit;

said first switch being closed and said second switch being closed during a make state to cause said amplification circuit to draw current from said tip/ring line;

said first switch being open and said second switch being open during a break state to prevent said amplification circuit from drawing current from said tip/ring line.

2. The DC driver circuit of claim 1 further comprising a third switch having a first terminal coupled to a voltage source and a second terminal coupled to said first capacitor, said third switch being closed during said break state to precharge said first capacitor.

3. The DC driver circuit of claim 1 wherein said RC circuit comprises a second capacitor, said second capacitor having a first terminal coupled to said amplification circuit and a second terminal coupled to ground.

4. The DC driver circuit of claim 3 wherein said first capacitor is greater than said second capacitor.

5. The DC driver circuit of claim 1 wherein said RC circuit comprises a resistor, said resistor having a first terminal coupled to said amplification circuit and a second terminal coupled to ground.

5 6. The DC driver circuit of claim 1 wherein said amplification circuit comprises an op amp coupled to a first transistor.

7. The DC driver circuit of claim 1 wherein said amplification circuit comprises an op amp coupled to a first transistor, said first transistor being coupled to a second transistor.

8. The DC driver circuit of claim 6 wherein said first transistor is coupled to said tip/ring line, wherein said first transistor is caused to draw current from said tip/ring line in said make state, and wherein said first transistor is prevented from drawing current from said tip/ring line in said break state.

9. The DC driver circuit of claim 7 wherein said first and second transistors are coupled to said tip/ring line, wherein said first and second transistors are caused to draw current from said tip/ring line in said make state, and wherein said first and second transistors are prevented from drawing current from said tip/ring line in said break state.

10. The DC driver circuit of claim 1 wherein said tip/ring line is coupled to a modem.

11. A circuit for reducing a peak voltage at a selected line, said circuit comprising:

at least one transistor driving said selected line;

5 said at least one transistor being driven by a first capacitor when said circuit is in a make state;

said at least one transistor being driven by an RC circuit when said circuit is in a break state;

10 said RC circuit reducing said peak voltage at said selected line when said circuit transitions from said make state to said break state.

12. The circuit of claim 11 wherein said selected line is a tip/ring line.

13. The circuit of claim 11 wherein said at least one transistor is driven by an op
15 amp.

14. The circuit of claim 13 wherein said op amp is driven by said first capacitor when said circuit is in said make state.

20 15. The circuit of claim 11 wherein a first switch causes said at least one transistor to be driven by said first capacitor when said circuit is in said make state.

16. The circuit of claim 15 wherein a second switch causes said at least one transistor to be driven by said RC circuit when said circuit is in said break state.

17. The circuit of claim 13 wherein said RC circuit comprises a second capacitor,
5 said second capacitor having a first terminal coupled to said op amp and a second terminal coupled to ground.

18. The circuit of claim 17 wherein said first capacitor is greater than said second capacitor.

19. The circuit of claim 16 further comprising a third switch having a first terminal coupled to a voltage source and a second terminal coupled to said first capacitor, said third switch being closed during said break state to precharge said first capacitor.

20. The circuit of claim 13 wherein said RC circuit comprises a resistor, said resistor having a first terminal coupled to said op amp and a second terminal coupled to ground.

21. The circuit of claim 12 wherein said tip/ring line is coupled to a modem.